INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2004/001854

A. CLASSIFICATION OF SUBJECT MATTER
G06T-7/00, G06T-1/00, G06K-9/46
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC[7]: G06T-7/00, G06T-1/00, G06K-9/46 in combination with keywords

Documentation searched other than minimum documentation to the extent that such documents are included in the fields

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms

Canadian Patent database, USPTO West, IEEE Xplore, Google scholar Search terms: agent(s), image, segmentation,

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
X	"Design of Image Exploring Agent using Genetic Programming", Köppen M. et al., Fuzzy Sets and Systems, Special Issue on Softcomputing, 103 (1999) pp 303-315. Also available at http://visionic.fhg.de/ipk/koeppen/	1, 2, 15
Y		3-13
X	"Toward evolutionary autonomous agents for computational perception", Liu J. et al, IEEE International Conference on Systems, Man, and Cybernetics 1997, Oct 12-15, 1997, Orlando FL (USA), vol. 4, pages 3096-3101.	14
Y		3-13

[X] Further documents are listed in the continuation of Box C.   [ ] See patent family annex.

<table>
<tr><td>*</td><td>Special categories of cited documents :</td><td>"T"</td><td>later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td></tr>
<tr><td>"A"</td><td>document defining the general state of the art which is not considered to be of particular relevance</td><td></td><td></td></tr>
<tr><td>"E"</td><td>earlier application or patent but published on or after the international filing date</td><td>"X"</td><td>document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td></tr>
<tr><td>"L"</td><td>document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td><td>"Y"</td><td>document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td></tr>
<tr><td>"O"</td><td>document referring to an oral disclosure, use, exhibition or other means</td><td></td><td></td></tr>
<tr><td>"P"</td><td>document published prior to the international filing date but later than the priority date claimed</td><td>"&"</td><td>document member of the same patent family</td></tr>
</table>

Date of the actual completion of the international search	Date of mailing of the international search report
11 February 2005 (11-02-2005)	07 March 2005 (07-03-2005)
Name and mailing address of the ISA/CA *Canadian Intellectual Property Office* *Place du Portage I, C114 - 1st Floor, Box PCT* *50 Victoria Street* *Gatineau, Quebec K1A 0C9* Facsimile No: 001(819)953-2476	Authorized officer Serge Carrier (819) 997-2322

C (Continuation).	DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
X	"Adaptive Image Segmentation with Distributed Behavior-Based Agents", Liu J. et al., IEEE Transactions on Pattern Analysis and Machine Intelligence, vol. 21, no. 6, June 1999, pp. 544-551.	14
Y		3-13
X	"A Multi-Agent System to Segment Living Cells ", Boucher A. et al., Proceedings of the 13th International conference on Pattern Recognition, Aug. 25-29, 1996, Vienna, vol. 3, pp. 558-562.	14
Y		3-13
X	"A Cellular Coevolutionary Algorithm for Image Segmentation", Veenman Cor. J. et al, IEEE Transactions on Image Processing, vol. 12, no 3, March 2003. pp.304-316	14
Y		3-13
A	ARL review 2001, The Applied Research Laboratory, The Pennsylvania State University, Richard L.Tutwiler et al, pp. 1-5. See section "Multi-Agent Imaging" on pages 4-5. Available at http://www.arl.psu.edu/ARLreview2001	1-15